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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MILLER PATENT SERVICES 2500 DOCKERY LANE RALEIGH, NC 27606			EXAMINER SCHNURR, JOHN R	
			ART UNIT 2623	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/774,871

Applicant(s)

CANDELORE ET AL.

Examiner

John R. Schnurr

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____  |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :05/17/2007, 02/12/2007, 10/30/2006, 07/24/2006, 04/25/2006, 01/30/2006, 11/10/2005, 10/28/2005, 08/22/2005, 07/29/2005, 06/03/2005, 03/15/2005, 11/03/2004, 04/26/2004.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see pages 10-13, filed 03/05/2007, with respect to the rejection(s) of claim(s) 1-57 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art references.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims **1, 2, 4, 5, 7, 13, 16, 23-26, 29, 36, 38, 41, 42, 44, 45, 47 and 49** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ashley et al. (US Patent Application Publication 2006/0015750)**, herein Ashley, in view of **Lu (US Patent Application Publication 2002/0157115)**.

Consider **claims 1 and 41**, Ashley clearly teaches a method of manipulating a stream of data in a device comprising:

receiving a stream of data from a host, the stream of data comprising a plurality of packets each having a packet identifier (PID) associated therewith; **(The device receives a stream of MPEG-2 data, [0020].)**

selecting certain of the packets for remapping of the packet identifiers associated with the selected packets; **(Packets are chosen for remapping, [0029].)**

remapping the packet identifiers of the selected packets so that the packets are associated with a new packet identifier; **(Packets are remapped, [0029].)**

Ashley further teaches the device includes a decryption module a processor and an encryption module.

However, Ashley does not explicitly teach the device comprising a CableCard device, which sends the stream of data back to the host.

In an analogous art Lu, which discloses a system for processing a stream of data using a point of deployment (POD) module, clearly teaches a POD which performs encryption and decryption of data streams and contains a processor. **(Fig. 3: POD module 300 includes data processor 310, [0042], and encryption/decryption of data streams, [0034].)** The data stream is sent back to the host after being processed. **([0041])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Ashley by integrating the data stream manipulation circuitry onto a POD module, as taught by Lu, for the benefit of enabling standard electronic devices to perform enhanced applications (see [0005] of Lu).

Consider **claims 2, 24 and 42**, Ashley combined with Lu, as in claims 1, 23 and 41, clearly teaches the stream of data includes encrypted packets. **([0029] Ashley)**

Consider **claims 4 and 44**, Ashley combined with Lu, as in claims 1 and 41, clearly teaches decrypting the encrypted packets. **(Fig. 3: Decryption module 13, [0029] Ashley.)**

Consider **claims 5 and 45**, Ashley combined with Lu, as in claims 1 and 41, clearly teaches re-encrypting the encrypted packets. **(Fig. 3: Encryption module 18, [0030] Ashley.)**

Consider **claims 7, 16, 29, 38 and 47**, Ashley combined with Lu, as in claims 1, 13, 23 and 36, clearly teaches remapping is carried out on the decrypted packets. **(Fig. 3: Remapping is performed after decryption, [0029] Ashley.)**

Consider **claim 13**, Ashley clearly teaches a method of manipulating a stream of data in a device comprising:

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receiving a stream of data from a host, the stream of data comprising a plurality of packets each having a packet identifier (PID) associated therewith, and wherein the stream of data further comprises encrypted packets; **(The device receives an encrypted stream of MPEG-2 data, [0020].)**

selecting certain of the packets for remapping of the packet identifiers associated with the selected packets; **(Packets are chosen for remapping, [0029].)**

remapping the packet identifiers of the selected packets so that the packets are associated with a new packet identifier; **(Packets are remapped, [0029].)**

decrypting the encrypted packets; **(Fig. 3: Decryption module 13, [0029] Ashley.)**

re-encrypting the decrypted packets; **(Fig. 3: Encryption module 18, [0030] Ashley.)**

Ashley further teaches the device includes a decryption module a processor and an encryption module.

However, Ashley does not explicitly teach the device comprising a CableCard device, which sends the stream of data back to the host.

In an analogous art Lu, which discloses a system for processing a stream of data using a point of deployment (POD) module, clearly teaches a POD which performs encryption and decryption of data streams and contains a processor. **(Fig. 3: POD module 300 includes data processor 310, [0042], and encryption/decryption of data streams, [0034].)** The data stream is sent back to the host after being processed. **([0041])**

See the motivation for claim 1.

Consider **claim 23**, Ashley clearly teaches a method of manipulating a stream of data in a device comprising:

means for receiving a stream of data from a host, the stream of data comprising a plurality of packets each having a packet identifier (PID) associated therewith; **(The device receives an encrypted stream of MPEG-2 data, [0020].)**

a PID remapper that selects certain of the packets for remapping of the packet identifiers associated with the selected packets, and remaps the packet identifiers of the selected packets so that the packets are associated with a new packet identifier; **(Packets are remapped, [0029].)**

Ashley further teaches the device includes a decryption module a processor and an encryption module.

However, Ashley does not explicitly teach the device comprising a CableCard device, which sends the stream of data back to the host.

In an analogous art Lu, which discloses a system for processing a stream of data using a point of deployment (POD) module, clearly teaches a POD which performs encryption and decryption of data streams and contains a processor. **(Fig. 3: POD module 300 includes data processor 310, [0042], and encryption/decryption of data streams, [0034].)** The data stream is sent back to the host after being processed. **([0041])**

See the motivation for claim 1.

Consider **claim 25**, Ashley combined with Lu, as in claim 23, clearly teaches a decrypter for decrypting packets. **(Fig. 3: Decryption module 13, [0029] Ashley.)**

Consider **claim 26**, Ashley combined with Lu, as in claim 23, clearly teaches an encrypter for re-encrypting the packets. **(Fig. 3: Encryption module 18, [0030] Ashley.)**

Consider **claim 36**, Ashley clearly teaches a method of manipulating a stream of data in a device comprising:

means for receiving a stream of data from a host, the stream of data comprising a plurality of packets each having a packet identifier (PID) associated therewith, wherein the stream of data further comprises encrypted packets; **(The device receives an encrypted stream of MPEG-2 data, [0020].)**

a PID remapper that selects certain of the packets for remapping of the packet identifiers associated with the selected packets, and remaps the packet identifiers of the selected packets so that the packets are associated with a new packet identifier; **(Packets are remapped, [0029].)**

a decrypter for decrypting the encrypted packets; **(Fig. 3: Decryption module 13, [0029] Ashley.)**

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an encrypter for re-encrypting the decrypted packets; (**Fig. 3: Encryption module 18, [0030] Ashley.**)

Ashley further teaches the device includes a decryption module a processor and an encryption module.

However, Ashley does not explicitly teach the device comprising a CableCard device, which sends the stream of data back to the host.

In an analogous art Lu, which discloses a system for processing a stream of data using a point of deployment (POD) module, clearly teaches a POD which performs encryption and decryption of data streams and contains a processor. (**Fig. 3: POD module 300 includes data processor 310, [0042], and encryption/decryption of data streams, [0034].**) The data stream is sent back to the host after being processed. (**[0041]**)

See the motivation for claim 1.

Consider **claim 49**, Ashley combined with Lu, as in claim 23, clearly teaches remapping the PIDs of selected packet so the packets are associated with new PIDs. (**[0029] Ashley**)

4. Claims **3, 14, 27, 37 and 43** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ashley et al. (US Patent Application Publication 2006/0015750)** in view of **Lu (US Patent Application Publication 2002/0157115)**, as applied to claims 1, 13, 23, 36 and 41 above, and further in view of **Nanjundiah (US Patent Application Publication 2002/0129243)**.

Consider **claims 3, 14, 27, 37 and 43**, Ashley combined with Lu, as in claims 1, 13, 23, 36 and 41, clearly teaches a method of manipulating a stream of data in a CableCard device.

However, Ashley combined with Lu does not explicitly teach the stream of data being selectively encrypted.

In an analogous art Nanjundiah, which discloses a system for selectively encrypting data packets, clearly teaches selectively encrypting video data packets. (**[0027]**)



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Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Ashley and Lu by selectively encrypting the data packets, as taught by Nanjundiah, for the benefit of efficiently using processing resources when encrypting or decrypting large video files (see [0006] Nanjundiah).

5. Claims 6, 15, 17, 28, 30 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ashley et al. (US Patent Application Publication 2006/0015750)** in view of **Lu (US Patent Application Publication 2002/0157115)**, as applied to claims 1, 13, 23, 36 and 41 above, and further in view of **Hobrock et al. (US Patent Application Publication 2004/0247122)**, herein Hobrock.

Consider **claims 6, 15, 17, 28, 30 and 46**, Ashley combined with Lu, as in claims 1, 13, 23, 36 and 41, clearly teaches a method of manipulating a stream of data in a CableCard device.

However, Ashley combined with Lu does not explicitly teach remapping encrypted packets.

In an analogous art Hobrock, which discloses a system for decrypting encrypted transport streams, clearly teaches remapping encrypted packets. **([0061]-[0062])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Ashley and Lu by remapping encrypted packets, as taught by Hobrock, for the benefit of decoding multiple transport streams using a single decoder (see [0047]-[0048] Hobrock).

6. Claims 8, 18, 31, 39 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ashley et al. (US Patent Application Publication 2006/0015750)** in view of **Lu (US Patent Application Publication 2002/0157115)**, as applied to claims 1, 13, 23, 36 and 41 above, and further in view of **Safadi (US Patent 6,883,050)**.

Consider **claims 8, 18, 31, 39 and 48**, Ashley combined with Lu, as in claims 1, 13, 23, 36 and 41, clearly teaches a method of manipulating a stream of data in a CableCard device.

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However, Ashley combined with Lu does not explicitly teach the CableCard being OpenCable compliant.

In an analogous art Safadi, which discloses a system for interfacing a POD and a host device, clearly teaches using an OpenCable compliant POD. **(Column 2 lines 16-33)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Ashley and Lu by using an OpenCable compliant POD, as taught by Safadi, for the benefit of allowing fast efficient data sharing between the POD and host (see column 2 lines 32-33 Safadi).

7. Claims **9, 19, 32, 40 and 50** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ashley et al. (US Patent Application Publication 2006/0015750)** in view of **Lu (US Patent Application Publication 2002/0157115)**, as applied to claims 1, 13, 23, 36 and 41 above, and further in view of **Devara (US Patent Application Publication 2002/0144260)**.

Consider **claims 9, 19, 32, 40 and 50**, Ashley combined with Lu, as in claims 1, 13, 23, 36 and 41, clearly teaches a method of manipulating a stream of data in a CableCard device.

However, Ashley combined with Lu does not explicitly teach substituting packets on a packet for packet basis.

In an analogous art Devara, which discloses a system for inserting content into an MPEG transport stream, clearly teaches substituting packets on a packet for packet basis. **(Content is inserted into the stream by replacement of selected packets, [0020].)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Ashley and Lu by substituting content on a packet for packet basis, as taught by Devara, for the benefit of maximum utilization of available bandwidth (see [0005] Devara).

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8. Claims **10, 20, 33 and 51** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ashley et al. (US Patent Application Publication 2006/0015750)** in view of **Lu (US Patent Application Publication 2002/0157115)**, as applied to claims 1, 13, 23, 36 and 41 above, and further in view of **Hawkins et al. (US Patent Application Publication 2004/0172650)**, herein Hawkins.

Consider **claims 10, 20, 33 and 51**, Ashley combined with Lu, as in claims 1, 13, 23, 36 and 41, clearly teaches a method of manipulating a stream of data in a CableCard device.

However, Ashley combined with Lu does not explicitly teach inserting packets into the transport stream.

In an analogous art Hawkins, which discloses a system for delivering targeted content, clearly teaches inserting packets into the transport stream.

**(The targeted content may be embedded into the transport stream, [0020])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Ashley and Lu by inserting packets into the transport stream, as taught by Hawkins, for the benefit of delivering content desirable to the user (see [0013] Hawkins).

9. Claims **11, 12, 21, 22, 34, 35, 52 and 53** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ashley et al. (US Patent Application Publication 2006/0015750)** in view of **Lu (US Patent Application Publication 2002/0157115)**, as applied to claims 1, 13, 23, 36 and 41 above, and further in view of **Hodges et al. (US Patent Application Publication 2003/0046687)**, herein Hodges.

Consider **claims 11, 12, 21, 22, 34, 35, 52 and 53**, Ashley combined with Lu, as in claims 1, 13, 23, 36 and 41, clearly teaches a method of manipulating a stream of data in a CableCard device.

However, Ashley combined with Lu does not explicitly teach inserting multiple packets for one packet or one packet for multiple packets.

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In an analogous art Hodges, which discloses a system for manipulating digital programming, clearly teaches inserting multiple packets for one packet or one packet for multiple packets. **(Substitute content can be of any duration, [0024])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Ashley and Lu by inserting multiple packets for one packet or one packet for multiple packets, as taught by Hodges, for the benefit of substituting content without affecting production quality (see [0003]-[0006]).

10. Claim 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gordon et al. (US Patent Application Publication 2003/0028879)**, herein Gordon, in view of **Lu (US Patent Application Publication 2002/0157115)**.

Consider **claim 54**, Gordon clearly teaches a method of manipulating a stream of data in a device comprising:

receiving first and second streams of data from a host, the first and second streams of data comprising a plurality of packets each having a packet identifier (PID) associated therewith; **(Fig.16: The I-stream and predicted stream are received, [0121].)**

selecting certain of the packets from the second stream of data for remapping of the packet identifiers associated with the selected packets; **(Fig. 16: Certain packets from the prediction stream are chosen, [0122].)**

remapping the packet identifiers of the selected packets so that the packets are associated with a packet identifier that identifies the selected packets as being a part of the first stream; **(Fig. 16: The selected prediction stream packets are re-mapped, [0122].)**

However, Gordon does not explicitly teach the device comprising a CableCard device, which sends the stream of data back to the host.

In an analogous art Lu, which discloses a system for processing a stream of data using a point of deployment (POD) module, clearly teaches a POD which performs encryption and decryption of data streams and contains a processor. **(Fig. 3: POD module 300 includes data processor 310, [0042], and**

**encryption/decryption of data streams, [0034].)** The data stream is sent back to the host after being processed. **([0041])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Gordon by integrating the data stream manipulation circuitry onto a POD module, as taught by Lu, for the benefit of enabling standard electronic devices to perform enhanced applications (see [0005] of Lu).

11. Claim **55** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gordon et al. (US Patent Application Publication 2003/0028879)** in view of **Lu (US Patent Application Publication 2002/0157115)**, as applied to claim 54 above, and further in view of **Hawkins et al. (US Patent Application Publication 2004/0172650)**, herein Hawkins.

Consider **claim 55**, Gordon combined with Lu, as in claims 54, clearly teaches a method of manipulating a stream of data in a CableCard device.

However, Gordon combined with Lu does not explicitly teach inserting packets into the transport stream.

In an analogous art Hawkins, which discloses a system for delivering targeted content, clearly teaches inserting packets into the transport stream.  
**(The targeted content may be embedded into the transport stream, [0020])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Gordon and Lu by inserting packets into the transport stream, as taught by Hawkins, for the benefit of delivering content desirable to the user (see [0013] Hawkins).

12. Claims **56 and 57** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gordon et al. (US Patent Application Publication 2003/0028879)** in view of **Lu (US Patent Application Publication 2002/0157115)**, as applied to claim 54 above, and further in view of **Hodges et al. (US Patent Application Publication 2003/0046687)**, herein Hodges.

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Consider **claims 56 and 57**, Gordon combined with Lu, as in claim 54, clearly teaches a method of manipulating a stream of data in a CableCard device.

However, Gordon combined with Lu does not explicitly teach inserting multiple packets for one packet or one packet for multiple packets.

In an analogous art Hodges, which discloses a system for manipulating digital programming, clearly teaches inserting multiple packets for one packet or one packet for multiple packets. **(Substitute content can be of any duration, [0024])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Gordon and Lu by inserting multiple packets for one packet or one packet for multiple packets, as taught by Hodges, for the benefit of substituting content without affecting production quality (see [0003]-[0006]).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Schnurr whose telephone number is (571) 270-1458. The examiner can normally be reached on Monday - Friday, 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JRS

JASON SALCE  
PRIMARY PATENT EXAMINER

A handwritten signature in black ink, appearing to read "Jason Salce", written over the printed name and title.